

What is claimed is:

1. A write precompensation amount setting method, comprising

5 setting an optimum write precompensation amount at a low temperature according to respective head characteristics with an electric current used at an ordinary temperature, and at a irregular electric current.

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2. The write precompensation amount setting method according to claim 1, wherein

 the irregular electric current is an electric current higher than the electric current used at the
15 ordinary temperature.

3. The write precompensation amount setting method according to claim 1, wherein

 the irregular electric current is an electric
20 current lower than the electric current used at the ordinary temperature.

4. The write precompensation amount setting method according to claim 1, further comprising

25 obtaining a precompensation amount of each head

with an electric current lower than the electric current used at the ordinary temperature, and determining a write precompensation amount at the low temperature according to the obtained precompensation amount.

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5. The write precompensation amount setting method according to claim 1, further comprising

obtaining a precompensation amount of each head with an electric current higher than the electric
10 current used at the ordinary temperature, and determining a write precompensation amount at the low temperature according to the obtained precompensation amount.

15 6. The write precompensation amount setting method according to claim 1, wherein

the head characteristics are a non-linear transition shift (NLTS) characteristic.

20 7. A write precompensation amount setting apparatus, comprising:

a detecting unit detecting respective head characteristics with an electric current used at an ordinary temperature, and a irregular electric current;
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a setting unit setting an optimum write precompensation amount at a low temperature according to the head characteristics detected by said detecting unit.

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8. The write precompensation amount setting apparatus according to claim 7, wherein

the irregular electric current is an electric current higher than the electric current used at the
10 ordinary temperature.

9. The write precompensation amount setting apparatus according to claim 7, wherein

the irregular electric current is an electric
15 current lower than the electric current used at the ordinary temperature.

10. The write precompensation amount setting apparatus according to claim 7, wherein

20 a precompensation amount of each head with an electric current lower than the electric current used at the ordinary temperature is obtained, and a write precompensation amount at the low temperature is determined according to the obtained precompensation
25 amount.

11. The write precompensation amount setting apparatus according to claim 7, wherein

5 a precompensation amount of each head with an electric current higher than the electric current used at the ordinary temperature is obtained, and a write precompensation amount at the low temperature is determined according to the obtained precompensation amount.

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12. The write precompensation amount setting apparatus according to claim 7, wherein

the head characteristics are a non-linear transition shift (NLTS) characteristic.

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